Cardinal®
DETECTO

ELECTRONIC PHYSICIAN
Waist-High Scale
6027 and 6029 Series
Owner's Manual

REGISTERED ISO 9001:2000

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11/06

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INTRODUCTION

Thank you for your purchase of our Detecto Electronic Physician Waist-High Scale. It was built with Detecto quality and reliability at our factory in Webb City, Missouri. This manual will guide you through installation, and operation of your scale. Please read it thoroughly before attempting to operate this scale and keep it handy for future reference.

FCC COMPLIANCE STATEMENT

WARNING! This equipment generates uses and can radiate radio frequency and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area may cause interference in which case the user will be responsible to take whatever measures necessary to correct the interference.

You may find the booklet "How to Identify and Resolve Radio TV Interference Problems" prepared by the Federal Communications Commission helpful. It is available from the U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 001-000-00315-4.

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Serial Number_____
Date of Purchase _____
Purchased Form_____
_____
_____

RETAIN THIS INFORMATION FOR FUTURE USE

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SPECIFICATIONS

Power Requirements	6 “AA” size Alkaline, Ni-Cad or NiMH batteries (not included) OR an optional 100 to 240 VAC 50/60Hz 12 VDC 1A wall plug-in UL/CSA listed AC power supply.
Operating Temperature	14º to 104º F (-10º to +40º C)
Capacity	400 lb x .5 lb (180 kg x .2 kg)
Platform Size	11" x 13"
Dimensions	12.5” W x 16” D x 38” H
Weight	17 lb (7.7kg)

PRECAUTIONS

Before using this instrument, read this manual and pay special attention to all "WARNING" symbols:

IMPORTANT

ELECTRICAL WARNING

UNPACKING INSTRUCTIONS

- Remove scale from carton by lifting up with equal force from column and platform base of the scale.
- Inspect the scale for any signs of damage due to shipping, such as exterior dents and scratches. It is the responsibility of the Purchaser to file all claims for any damages or loss in transit incurred. Retain packing and shipping carton for return of scale if necessary.
- Remove all plastic wrapping, foam fillers and cardboard material from the scale.
- Remove and unpack the power supply and cord, if the scale was ordered with this option.

CARE AND CLEANING OF SCALE

- DO NOT subject the platform to sudden shocks.
- DO NOT spray water directly on the display head.
- DO avoid areas where the scale might be exposed to moisture.
- DO NOT use abrasive cleaners on this instrument.
- DO NOT use acetone or other volatile solvents for cleaning.
- DO clean the scale using a damp soft cloth and mild detergent.

INSTALLATION

Power Supply

To power the weight indicator without batteries, connect the 12 VDC, 1 Amp power supply's connector into the power jack on the lower back of the indicator and then plug the power supply into the proper electrical outlet. See Figure 1. On models requiring 220 VAC, it is the customer's responsibility to obtain the correct power adapter plug. The scale is now ready for operation.

NOTE! The power supply is also used to recharge the batteries, when the weight indicator is operated from Ni-Cad or NiMH batteries.

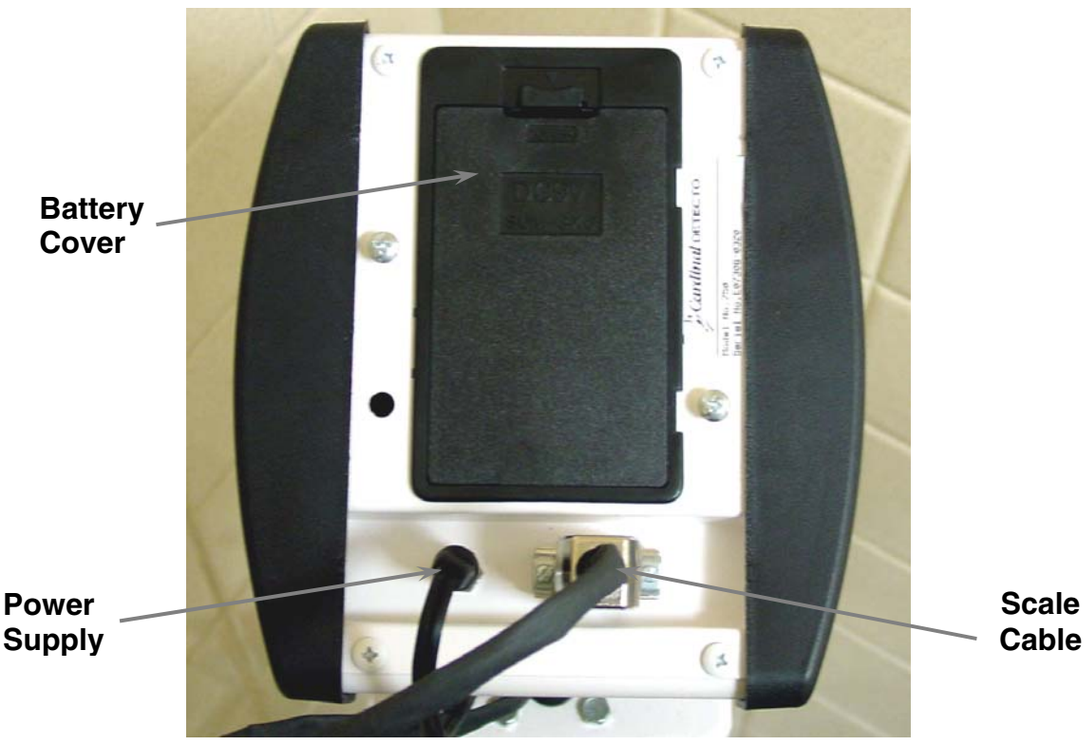


Figure No. 1

INSTALLATION, Cont.

Batteries

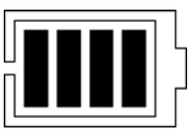
Battery operation is a standard feature of the weight indicator, although the batteries are optional (not included). The indicator can be operated from 6 "AA" size Alkaline, Ni-Cad or NiMH batteries. You must first obtain and install batteries before operations can begin. Batteries are contained in a battery holder inside the indicator. Access is via a removable panel on the back of the indicator.

When using batteries, all 6 batteries must be of the same type. They must be all Alkaline, Ni-Cad or all NiMH. In addition, **DO NOT** mix Ni-Cad or NiMH batteries.

CAUTION! The weight indicator has internal circuitry that when used in conjunction with the external power supply, recharges the Ni-Cad or NiMH batteries. Because the indicator has this charging capability, **DO NOT** connect a power supply to the indicator if using Alkaline batteries.

Battery Operation

The weight indicator will operate for up to 250 hours on new Alkaline batteries or for up to 100 hours on fully charged Ni-Cad or NiMH batteries depending on the condition of the batteries (from new to about 500 recharges). The battery bar graph on the display indicates the battery capacity in 4 steps:



4 segments - the full battery capacity is available,
3 segments - the battery is at 75% of capacity,
2 segments - the battery is at 50% of capacity,
1 segment: - the battery is at 25% capacity.

When the battery voltage drops too low for accurate weighing, the indicator will show LobAt and then shut off. You will be unable to turn the indicator back on until the Alkaline batteries have been replaced or the AC power supply is connected to the display to operate it and recharge the Ni-Cad or NiMH batteries.

Battery Charging

To recharge the Ni-Cad or NiMH batteries, the AC power supply must be connected to a power outlet and plugged into the indicator. It will take approximately 8 to 10 hours to fully recharge the batteries in the display. Charging the batteries for more than 10 hours *will not* damage them. **NOTE!** The indicator may be operated while the batteries are charging.

INSTALLATION, Cont.

Battery Installation/Replacement

To install or remove the batteries, the following steps should be followed:

1. Remove indicator from desk stand/wall mount bracket if used.
2. Turn the indicator so that the display is facing away from you.
3. Locate the rectangular panel on back of indicator.
4. To install or replace the batteries, first remove the battery holder cover by pushing in on the tab and lifting it up. Refer to Figure No. 2.
5. If installing new batteries, proceed to step 6. If replacing the batteries, remove all 6 batteries from the battery holder and then proceed to step 6.
6. Install the 6 new “AA” size batteries in the battery holder, noting the polarity markings located in the battery holder. Refer to Figure No. 3.
7. After placing all 6 batteries in the holder, replace the battery cover.
8. Make sure power supply is unplugged, and then turn indicator over (display facing up) and press **ON / OFF** key.
9. If display turns on, batteries have been installed correctly. If not, remove panel and check for one or more improperly positioned batteries.
10. Return the indicator to desk stand/wall mount bracket if used.
11. The scale is now ready for operation.

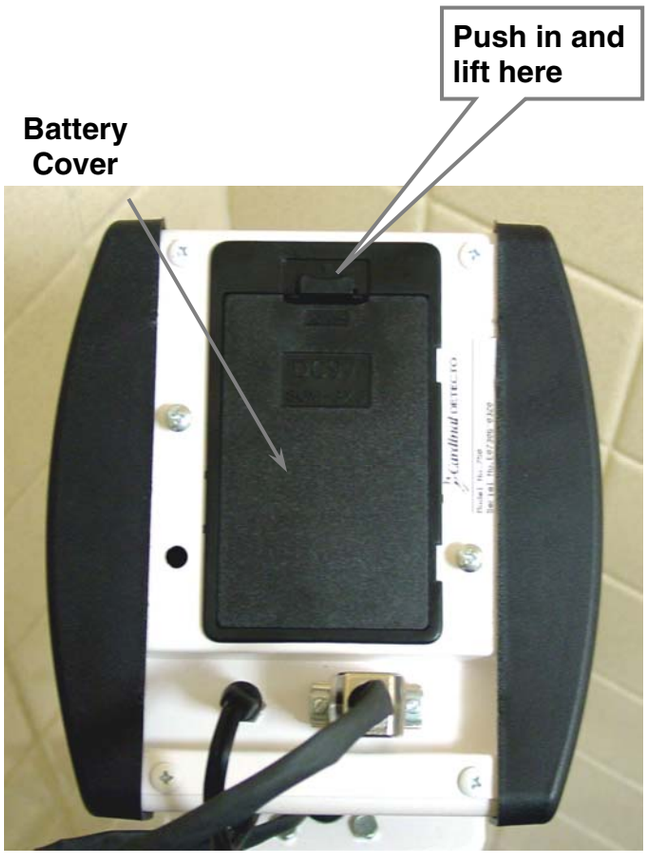


Figure No. 2

Figure No. 3

For more information on setup and operation of the indicator, see the 750 Owner’s Manual (8555-M260-O1).

OPERATION

DO NOT operate the keypad with pointed objects (pencils, pens, etc). Damage to keypad resulting from this practice is NOT covered under warranty.

Basic Weighing Operation

To Weigh

1. Set scale on any hard, level, flat surface or low-cut carpet.
2. Press **ON / OFF** key to turn on indicator.
3. Press **ZERO** key to zero weight display. The ZERO and lb or kg annunciator will turn on to show that scale is ready for use.
4. Place patient on scale and read weight display.
5. Remove patient from scale.

Figure No. 4

Zero Weight Display

1. If the indicator is not showing zero weight on the display, press **ZERO** key.
2. Weight display will return to zero. ZERO, STABLE ◣◢ and lb or kg annunciators will turn on to show a stable, center-of-zero weight condition.

Metric Conversion

Press **UNITS** key to toggle between pounds and kilograms. Note that lb or kg annunciator will turn on to show which weighing unit is active.

To Weigh and Calculate BMI

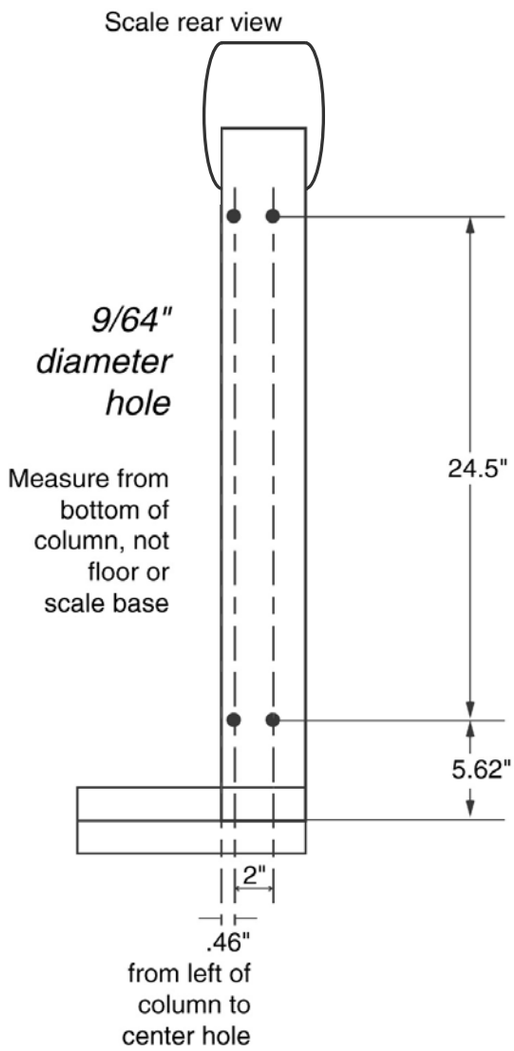
1. Press **ON / OFF** key to turn on indicator.
2. Press **ZERO** key to zero weight display. The ZERO and lb or kg annunciator will turn on to show that scale is ready for use.
3. Place patient on scale and read weight display.
4. Press **BMI / ENTER** key.
5. If pounds is the active weighing unit, display will change to show 5 **FEET**, 6 **INCHES** with the 6 blinking. *(The blinking character is the position to be changed)*.
    a. Press ▲ or ▼ keys until desired height in inches is displayed and then press ◀ or ▶ key to move the blinking character to FEET.
    b. Press ▲ or ▼ keys until desired height in feet is displayed.
    c. Proceed to Step 7.
6. If kilograms is the active weighing unit, display will change to show 170 **cm**.with the 0 of 170 blinking. *(The blinking character is the position to be changed)*...
    a. Press ▲ or ▼ keys until the desired number is displayed.
    b. Press ◀ or ▶ key to move to next character to change.
    c. Repeat steps A and B until the desired height in centimeters is displayed.
    d. Proceed to Step 7.
7. Press **BMI / ENTER** key.
8. Read BMI on display.
9. Remove patient from scale.
10. Press **BMI / ENTER** key to return to weighing operation.

ERROR AND STATUS DISPLAYS

Display	Meaning
-Err-	General error, invalid keypad entry was attempted.
-OF-	Attempting to display a negative number greater than –9,999 or a positive number greater than 99,999
-trL-	Indicates an attempt to zero a weight outside scale zero range. (See Four Percent Zero Tracking Range Limit).
-UnS-	Motion is present when indicator is attempting to perform one of the following operations: Power Up Zero or Zero Weight Display
CAL ib	Indicates calibration is necessary.
AdErr ErrAL ErrAH	Consult your scale service representative.
OCAP	Scale weight exceeds scale capacity
OFF	Displayed to indicate indicator is turning off.

HEIGHT ROD INSTRUCTIONS

- Please check Height Rod hole locations before installing Height Rod.
- Some models may require holes to be drilled.
- Please follow the measurements for drilling holes if necessary.
- After holes have been drilled, please follow installation instruction.



HEIGHT ROD INSTRUCTIONS, Cont.

Height Rod Installation

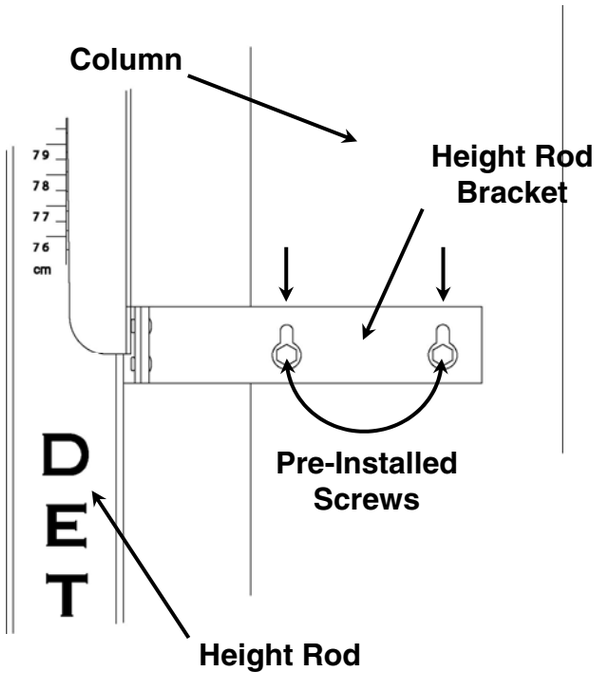
1. Remove Height Rod from shipping container. Inspect for signs of damage. Contact Detecto Customer Service Department if necessary.

2. Remove cardboard insert from height rod.

3. If not already installed, insert the four hex head screws from the hardware pack into the holes in the back of the column and tighten them with the included wrench until the hex heads are 1/8" from the column.

4. Place both height rod brackets over the four pre-installed hex head screws and pull down, securing brackets.

5. Use the included wrench to tighten the hex head screws. Do not over tighten screws.



Height Rod Operation

1. Before patient steps onto scale platform, spoon should be rotated to horizontal position, and raised well above patient's apparent height.

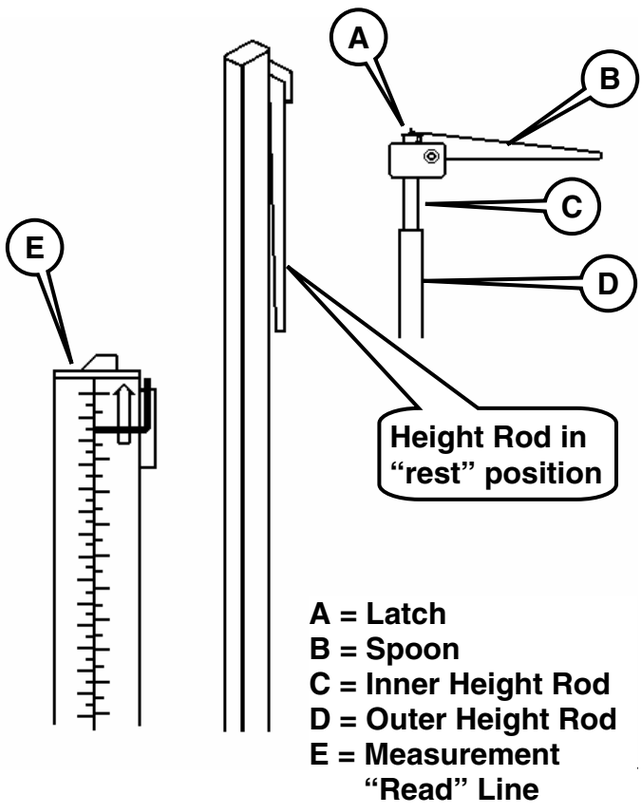
2. Patient may now step onto scale platform. Spoon should be held horizontal and above patient's head.

3. Carefully lower spoon, while keeping it horizontal, until it rests gently on top of patient's head. If patient is shorter than 3' 4" (101.5 cm), push latch to right while simultaneously pushing down on spoon, until the spoon rests horizontally on top of patient's head.

4. Read height of patient as follows:

   If back of spoon points to outer height rod, then it points to correct height.

   If back of spoon points to inner height rod, then correct height is read at top of outer height rod (see "Read" arrow on outer height rod).



5. While holding spoon horizontally, raise spoon above patient's head. Patient may now step off scale platform. Hold spoon horizontal until patient is clear of height rod.

6. Rotate spoon back to vertical position and adjust height rod back to rest position (i.e. spoon should be locked in place within inner height rod and inner rod should be at its lowest position).

STATEMENT OF LIMITED WARRANTY

Detecto Scale warrants its equipment to be free from defects in material and workmanship as follows: Detecto warrants to the original purchaser only that it will repair or replace any part of equipment which is defective in material or workmanship for a period of one **(1) year** from date of shipment. Detecto shall be the sole judge of what constitutes a defect.

During the **first ninety (90) days** Detecto may choose to supply all necessary replacement parts and service during normal weekday working hours at no charge to the buyer.

After the first ninety (90) days Detecto will supply parts and service at the job site provided the owner agrees to pay the Dealer for all travel time, including mileage and test equipment, as well as any expenses incurred over the direct labor of the technician at the job site. This limited warranty honors only labor performed by Detecto authorized dealers.

This warranty does not apply to peripheral equipment not manufactured by Detecto; this equipment will be covered by certain manufacturer's warranty only.

This warranty does not include replacement of expendable or consumable parts. This does not apply to any item which has deteriorated or damaged due to wear, accident, misuse, abuse, improper line voltage, overloading, theft, lightning, fire, water or acts of God, or due to extended storage or exposure while in purchaser's possession. This warranty does not apply to maintenance service. Purchased parts will have a ninety (90) day repair or replacement warranty only.

Detecto may require components be returned to the factory; they must be properly packed and shipping charges prepaid. A return authorization number must be obtained for all returns and marked on the outside of all returned packages. Detecto accepts no responsibility for loss or damage in transit.

STATEMENT OF LIMITED WARRANTY

Conditions Which Void Limited Warranty

This warranty shall not apply to equipment which:
A.) Has been tampered with, defaced, mishandled or have had repairs and modifications not authorized by Detecto.
B.) Has had serial number altered, defaced, or removed.
C.) Has not been grounded according to Detecto's recommended procedure.

Freight Carrier Damage

Claims for equipment damaged in transit must be referred to the freight carrier in accordance with freight carrier regulations.

This warranty sets forth the extent of our liability for breach of any warranty or deficiency in connection with the sale or use of the product. Detecto will not be liable for consequential damages of any nature, including but not limited to, loss of profit, delays or expenses, whether based on tort or contract. Detecto reserves the right to incorporate improvements in material and design without notice and is not obligated to incorporate improvements in equipment previously manufactured.

The foregoing is in lieu of all other warranties, express or implied including any warranty that extends beyond the description of the product including any warranty of merchantability or fitness for a particular purpose. This warranty covers only those Detecto products installed in the forty-eight (48) contiguous continental United States.

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